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NASA/National Endowment for the Arts

# Students Create Virtual Worlds on Mars with SketchUp Software!

Students living in the Academy
Homes Housing and Urban
Development complex in Roxbury,
Massachusetts took the Imagine
Mars challenge one step further by
using 3D CAD/CAM software to
build their martian communities.

Thirteen students spent five days creating architectural designs for healthy and sustainable communities for 100 people on Mars. After learning about their own community, and hearing from the actual architect who designed their complex, students got to work on their designs.

"Their goal was to determine whether good design can make community life better," explained Project Leader David Delgado.

Students learned how to use software called SketchUp to transform their ideas into a computerized 3D world. NASA has an informal partnership with this company and can offer a free version of the software to any student group interested in using it for an Imagine Mars Project. Contact us for more information. We'll be posting their projects soon, so be sure to check back at the Imagine Mars Gallery.

http://imaginemars.jpl.nasa.gov/gallery
In the meantime, here's a sneak peek
at what they created . . . .







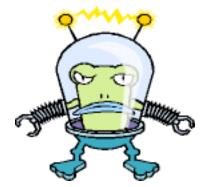
### PROJECT OF THE SEASON



Carol, a student from the Academy Homes Housing and Urban Development Complex in Roxbury, Massachusetts designed her community using 3D CAD/CAM software. In considering how design can improve community life, she included a central meeting place, plenty of green areas and places to sit. All of this was enclosed in a special dome to protect inhabitants from the harsh martian environment. Her design was so well planned that a visiting architect expressed interest in hiring her for an internship.

Carol's project will be posted soon! http://imaginemars.jpl.nasa..gov/gallery

## Would Your Students Like to Talk to a NASA Scientist about Mars?



We're waiting for you! Just give us a call, or write us a note at <a href="maginemars@jpl.nasa.gov">imaginemars@jpl.nasa.gov</a> and we'll set your students up with a one-on-one interview with NASA scientists and engineers. This is a great opportunity to get students more comfortable and excited about science and careers in engineering.

Once you post your Imagine Mars project, we can have scientists and engineers provide feedback on your student's work - a review from the experts!



All of these opportunities are free and intended to support your projects. Remember, we're here to help you design a project too!

#### Mars Reconnaissance Orbiter Mission Status

(From http://mars.jpl.nasa.gov) November 18, 2005

NASA's Mars Reconnaissance Orbiter successfully fired six engines for about 20 seconds today to adjust its flight path in advance of its March 10, 2006, arrival at the red planet.

Since its Aug. 12 launch, the multipurpose spacecraft has covered about 60 percent of the distance for its trip from Earth to Mars. It will fly about 40-million kilometers (25-million miles) farther before it enters orbit around Mars. It will spend half a year gradually adjusting the shape of its orbit, then begin its science phase. During that phase, it will return more

data about Mars than all previous missions combined. The spacecraft has already set a record transmission rate for an interplanetary mission, successfully returning data at 6 megabits per second, fast enough to fill a CD-ROM every 16 minutes. For more on this story visit: http://mars.jpl.nasa.gov/mro/newsroom



Artist's concept of MRO en route to Mars. Image Credit: NASA/PL



#### Become a Cooperating Organization

The Cooperating organization commitment forms are now online on the Imagine Mars Web site. We are seeking the help of education, arts, technology and science-focused organizations to help spread the word about the Imagine Mars project.

Cooperating organizations will receive special advance notification of new site features, special invitations to webcasts and have the opportunity to submit their education-related news for the Imagine Mars e-mail newsletter. The Imagine Mars Project will also recognize cooperating organizations on the project site and link to their websites.

In turn, cooperating organizations will be asked to post an official link from their sites to the Imagine Mars

project website and print periodic project-related news in e-mail and print newsletters about upcoming Imagine Mars events. Log on now to http://ImagineMars.jpl.nasa.gov/about /become.html and download your copy of the cooperating organization commitment form and help us on our mission to bring the Imagine Mars project to students everywhere.





#### About Imagine Mars...

The Imagine Mars Project is cosponsored by NASA and the National Endowment for the Arts (NEA). It is a Web-based initiative that provides you with lesson plans, Mars facts and other resources to lead student project teams. The goal of the project is to encourage students to explore their home community, to interact with scientists, artists, and community leaders, and to understand the different planetary environments

on Mars. Ultimately, students complete a project that highlights the scientific and cultural elements they determine would be important to their imagined community on Mars.

The project site, http://ImagineMars.jpl.nasa.gov, contains participation guides, resources for project leaders, profiles of artists, engineers, and scientists, a project gallery and other interactive features.



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On behalf of the National Aeronautics and Space Administration (NASA) the National Endowment for the Arts (NEA), the Jet Propulsion Laboratory (JPL) in Pasadena, California manages the Imagine Mars Project as part of the Mars Public Engagement program, which seeks to educate the public about scientific discoveries and benefits of NASA's missions to Mars. JPL is a division of the California Institute of Technology.



